Agenda and Talking Points for 9/29/14 Earth City Trustees Meeting

1. Site Background

    a. The West Lake Landfill Superfund Site is located on a 200-acre parcel about one mile north of the I-70 interchange within the city limits of Bridgeton, Mo., in northwestern St. Louis County. The Earth City Industrial Park is adjacent to the Site on the west. The Spanish Village residential subdivision is located less than one mile to the south and a trailer park is located ½ mile to the southeast.

    Two areas of the Site were radiologically-contaminated in 1973 when soils mixed with leached barium sulfate residues were used as daily and intermediate cover in the landfill operations. The barium sulfate residues, containing traces of uranium, thorium, and their long-lived daughter products, were some of the uranium ore processing residues generated by Mallinckrodt at its downtown St. Louis plant and were initially stored by the Atomic Energy Commission (AEC) on a 21.7-acre tract of land in a then undeveloped area of north St. Louis County, now known as the St. Louis Airport Site (SLAPS). This area is part of the St. Louis Formerly Utilized Sites Remedial Action Program managed by the U.S. Army Corps of Engineers (COE). The radium and lead-bearing residues – known as K-65 residues – were stored in drums prior to being relocated to federal facilities in New York and Ohio.

    In 1966 and 1967, the remaining residues from SLAPS were purchased by a private company for mineral recovery and placed in storage at a nearby facility on Latty Avenue under an AEC license. Most of the residues were shipped to Canon City, Colorado for reprocessing except for the leached barium sulfate residues, which were least valuable in terms of mineral content, i.e., most of the uranium and radium was removed in previous precipitation steps. Reportedly, 8,700 tons of leached barium sulfate residues were mixed with approximately 39,000 tons of soil and then transported to the Site. According to the landfill operator, the soil was used as cover for municipal refuse in routine landfill operations. The data collected during the Remedial Investigation (RI) are consistent with this account.

    The quarry pits were used for permitted solid waste landfill operations beginning in 1979. In August 2005, the Bridgeton Sanitary Landfill (Former Active Sanitary Landfill) stopped receiving waste, pursuant to an agreement with the city of St. Louis to reduce the potential for birds to interfere with airport operations.

    The Site is divided into two operable units (OUs), each with identifying areas. OU-1 consists of radiological areas 1 and 2 and the Buffer Zone/Crossroad Property; OU-2 consists of the other landfilled areas which did not receive any of the radiologically-contaminated soil:

    OU-1:

    • Radiological Area 1 –Approximately 10 acres are impacted by radionuclides. The radionuclides are in soil material that is intermixed with the overall landfill matrix consisting of municipal refuse. The total volume of radiologically-impacted materials is estimated at 33,500 cubic yards.

    • Radiological Area 2 – This area was also part of the unregulated landfill operations conducted prior to 1974. Approximately 30 acres are impacted by radionuclides. The radionuclides are in soil material that is intermixed with the overall landfill matrix consisting mostly of construction and demolition debris. The total volume of radiologically-impacted materials is estimated at 302,000 cubic yards.

• Buffer Zone/Crossroad Property – This property, also known as the Ford Property, lies west of Radiological Area 2 and became surficially-contaminated when erosion of soil from the landfill berm resulted in the transport of radiologically-contaminated soils from Area 2 onto the adjacent property.

OU-2:

• Closed Demolition Landfill – This area is located on the southeast side of Radiological Area 2. This landfill received demolition debris. It received none of the radiologically-contaminated soil. It operated under a permit with the State and was closed in 1995.

• Inactive Sanitary Landfill – This landfill is located south of Radiological Area 2 and was part of the unregulated landfill operations conducted prior to 1974. The landfill contains sanitary wastes and a variety of other solid wastes and demolition debris. It received none of the radiologically-contaminated soil.

• Former Active Sanitary Landfill – This municipal solid waste landfill, known as the Bridgeton Landfill, is located on the south and east portions of the Site. The landfill is subject to a State permit, which was issued in 1974. This landfill received none of the radiologically-contaminated soil. Landfill operations ceased in 2005 and closure and post-closure activities are currently in progress by MDNR in accordance with Missouri Solid Waste rules and regulations.

2. Ongoing Activities
    a. Subsurface Smoldering Event
        i. There is a SSE occurring on the Bridgeton LF side of the site. This piece of the site is managed under state authority and the work is being conducted by Republic Services. Republic has an extensive network of gas extraction wells and temperature monitoring probes to monitor the event, and currently has plans to expand its monitoring network. EPA maintains routine communication with MDNR to stay informed about the SSE. All current data suggest the SSE remains distant from the areas containing known RIM.
    b. Isolation Barrier
        i. EPA has been working with the PRPs to develop plans for a barrier that would serve to prevent the SSE from contacting areas known to contain RIM.
        ii. This is an enormously complex project from an engineering standpoint.
        iii. To assist in evaluating the complexities, advantages, and disadvantages of the various IB alternatives, EPA has enlisted the expertise of the USACE.
        iv. The USACE has prepared an initial assessment report of the IB alternatives, and the PRPs have recently been tasked to produce more detailed plans by mid-October.
        v. The more detailed plans will include bird mitigation plans to address the threat of potential bird strikes, given the proximity to the airport.
        vi. The SLAA and FAA must approve these plans before additional work can proceed.
    c. Off-Site Air Monitoring
        i. EPA has established an air monitoring system in the offsite areas surrounding the WLL Site. This system includes 5 air monitoring stations that collect data for a variety of constituents. A local field office has been set up as the control center for the air monitoring network, which is staffed each week by EPA On-Scene Coordinators and contractors. The field office has recently been relocated due to planned construction activities at the Fire Station.

3. What's Next?
    a. EPA will review the detailed plans for the IB alignment alternatives due mid-October.
    b. EPA will review the Bird Mitigation plans also due mid-October, and will coordinate that review with the SLAA and FAA.
    c. EPA will review the USGS report regarding groundwater data, and will communicate with the public regarding the conclusions.
    d. EPA continues to progress toward selection of a final remedy. We expect to approve work plans very soon for the next stages of Feasibility Study work that must be completed to support a new Proposed Plan and Record of Decision.

4. Engagement Opportunities/Information Needs
    a. EPA wants to keep stakeholders informed. There are a variety of ways to do that. How can we best accomplish that for the Earth City Business Park? How would you like to be kept informed?
        i. Periodic meetings?
        ii. Receive periodic Fact sheets?
        iii. Receive WL Update via email?
    b. Are there specific topics or subjects that would be especially helpful or beneficial for your constituents?